

slightly exceeding one-third the length of shell, ovate, the outer lip strongly arcuate above, columellar margin flattened above; peristome continuous, the adnate parietal portion longer than in *P. lapidaria*. Alt. 6, diam. $3\frac{1}{2}$ mm.

Black Falls, above Florence, Alabama (A. A. Hinkley, 1894).

The species is somewhat intermediate between *P. lapidaria* and *P. cincinnatiensis*, but more like the former, from which, however, it is very easily distinguished on comparison. The form is stouter, the aperture larger, the outer lip more strongly curved above, and the color duskier. The apex is somewhat eroded in all of the well grown specimens. The dentition is similar in general characters to that of *P. lapidaria*.

I am indebted to Mr. Bryant Walker for the specimens, which were collected by Mr. Hinkley. Upon inquiry, my correspondent quotes as follows from Mr. Hinkley's letter: "Most of the distance from Florence to the last lock of the canal there is a steep rocky bank; a few rods from the water of the river over this bank and out of it are several small streams and springs of clear water. The species under consideration was seen at most of these small streams but was not numerous except at the two falls from which they were taken. Three forms of *Goniobasis* were taken from the same streams. Now, while the *Goniobasis* were in the water, the others were not. They were taken from moss and decaying vegetation but were kept damp by the spray of the falls or by the dripping water under the rock back of the falls and the saturated moss. As I made a hurried trip the day I collected these shells, they were not examined closely, but I took it for granted they were feeding in the decaying vegetation. None of them were found beyond the reach of the spray but still they might have been hidden under the rubbish."

From this the new species appears, as Mr. Walker remarks, to be clearly Pomatiopsine in habits. In choosing a specific term for the form, I have acted upon the suggestion of Mr. Walker that the name of one of our best collectors be associated with this interesting species.

THE WEIGHT AND SIZE OF SHELLS.

BY REV. HENRY W. WINKLEY.

With the assistance of Mr. D. E. Owen, teacher of Physics in Thornton Academy, the writer has weighed a few species of minute shells. The results are given as follows:

Twelve specimens of *Astyris lunata* from Wood Hole, Mass. weighed 0.095 gms. This would make one specimen weigh about 0.008 gm. Reducing this to avoirdupois weight we have one shell weighing 0.000282 oz.

The next example is *Cerithiopsis Greenii*—being the first of the species found in Canadian waters, i. e. from Prince Edwards Island. Ten specimens weighed 0.023 gm. or in ounces one specimen would weigh 0.000081 oz.

Two sets of *Odostomia seminuda* were compared. The one being, like the above, the first found at Prince Edwards Island. The others came from near Woods Hole, Mass. It was found that the Canadians weighed each 0.000048 oz. while those from Mass. weighed each 0.000105 oz. The difference in size is noticeable without weighing. This proves that Mass. is a better place to live than Prince Edwards Island. The most interesting of all is New England's conchological elephant, *Skenea planorbis*. The set weighed was found near Saco, Me. The average weight of a specimen is 0.000018 oz. At this rate it would require 56,700 to make an ounce, 907,200 to the pound, and a ton would require 18,144,000,000. At the rate of five cents each, a pound would be worth \$45,360.00. I am sorry to say I cannot supply them by the ton, or pound.

After weighing, the writer became interested in size comparisons, and two species from the same region, i. e. Saco, were compared. The largest shell in my New England cabinet is *Macra solidissima*, and the smallest *Skenea planorbis*. The *Macra* weighs 17½ oz. It would require 1,004,250 of *Skenea* to balance the one *Macra*. The surface of the *Macra* was reduced to a flat as near as possible, divided into small squares, and the *Skenea* was placed on the small square to estimate the comparative size. Dividing an inch into sixteen squares, *Skenea* would find room enough for 25 on each square, or 405 to the square inch. On the total surface of the *Macra* (including both sides) there would be space enough for 30,000 individuals of *Skenea* to rest comfortably. The above species are all marines and hence the comparisons are more interesting since conditions of life are similar. Much larger forms occur in other waters but the specimens selected represent the extremes of the New England area. I need hardly say that in commercial life these extremes are avoided and the medium sizes are of more economic value and popularity.